

FORM PTO-1390  
(REV. 1-98)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371**

04851/

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

Applied **09/786164**

INTERNATIONAL APPLICATION NO.  
**PCT/DE99/02836** ✓

INTERNATIONAL FILING DATE  
**7 Sept. 1999 (7/9/99)** ✓

PRIORITY DATE CLAIMED  
**7 Sept. 1998 (7/9/98)** ✓

**TITLE OF INVENTION**

**Method For Improving The Security of Authentication Procedures in Digital Mobile  
Radio Telephone Systems** ✓

**APPLICANT(S) FOR DO/EO/US**

**Hake, Jens; Thelen Jorg** ✓

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 37 (b) and PCT Articles 22 and 39(1).
4. ☐ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a. ☐ is transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☒ has been transmitted by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☐ have been transmitted by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ A translation of the annexes of the International Preliminary Examination Report under PCT Article 36
11. ☐ An Information Disclosure Statement under 37 CFR 1.197 and 1.98
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☐ A **FIRST** preliminary amendment.
14. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
15. ☐ A substitute specification.
16. ☐ A change of power of attorney and/or address letter.
17. ☐ Other items or information:

U.S. APPLICATION NO. 09/7861

INTERNATIONAL APPLICATION NO. 532860  
PCT/DE99/02836

U.S. DOCKET NUMBER 046517

28 FEB 2001

17. ☒ The following fees are submitted  
BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(5)):Neither international preliminary examination fee (37 CFR 1.482)  
nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO  
and International Search Report not prepared by the EPO or JPO \$1000.00International preliminary examination fee (37 CFR 1.482) not paid to  
USPTO but International Search Report prepared by the EPO or  
JPO \$860.00International preliminary examination fee (37 CFR 1.482) not paid to  
USPTO but international search fee (37 CFR 1.445(a)(2)) paid to  
USPTO \$710.00International preliminary examination fee (37 CFR 1.482) paid to  
USPTO but all claims did not satisfy provisions of PCT Article  
33(1)-(4) \$690.00International preliminary examination fee (37 CFR 1.482) paid to  
USPTO and all claims satisfied provisions of PCT Article 33(1)-(4)  
\$100.00

ENTER APPROPRIATE BASIC FEE AMOUNT =

CALCULATIONS PTO USE ONLY

\$ 860.00

Surcharge of \$130.00 for furnishing the oath or declaration later than ☐ 20  
☐ 30 months from the earliest claimed priority date (37 CFR 1.492(e)).

\$

CLAIMS NUMBER FILED NUMBER EXTRA RATE

\$

Total claims - 20 = 0 X \$18.00

\$

Independent claims - 3 = 0 X \$80.00

\$

MULTIPLE DEPENDENT CLAIM(S) (if applicable) +\$ 270.00

\$

TOTAL OF ABOVE CALCULATIONS =

\$

Reduction of 1/2 for filing by small entity, if applicable. A Small Entity Statement  
must also be filed (Note 37 CFR 1.9, 1.27, 1.28) --

\$

SUBTOTAL =

\$ 860.00

Processing fee of \$130.00 for furnishing the English translation later than  
☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492(f)).

\$

TOTAL NATIONAL FEE =

\$

Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment  
must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per  
property

\$

TOTAL FEES ENCLOSED =

\$ 860.00

Amount to be  
refunded:

\$

charged:

\$

- a. ☒ A check in the amount of \$860.00 to cover the above fees is enclosed.
- b. ☐ Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ to cover the above fees. A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 16-1435. A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

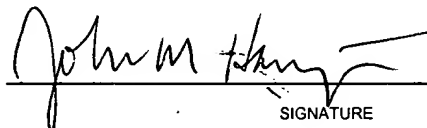
SEND ALL CORRESPONDENCE TO:

John M. Harrington Esq.

KILPATRICK STOCKTON LLP

1001 West Fourth Street

Winston-Salem, NC 27101



SIGNATURE

Name: John M. Harrington

Registration No. 25,592

70

**FEE TRANSMITTAL  
for FY 2001**

Patent fees are subject to annual revision.

**Complete if Known**

Application Number 09/786,164

Filing Date February 28, 2001

First Named Inventor Hake, Jens

Examiner Name

Group / Art Unit

Attorney Docket No. 04851/254423

**TOTAL AMOUNT OF PAYMENT** (\$) 410**METHOD OF PAYMENT (check one)**

- 1.
- ☐
- The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:

Deposit  
Account  
Number

16-1435

Deposit  
Account  
Name

- ☒
- Charge Any Additional Fee Required
- 
- Under 37 CFR 1.16 and 1.17
- 
- ☐
- Applicant claims small entity status.
- 
- See 37 CFR 1.27

- 2.
- ☒
- Payment Enclosed:

- ☒
- Check
- ☐
- Credit card
- ☐
- Money
- 
- Order
- ☐
- Other

**FEE CALCULATION****1. BASIC FILING FEE**

| Large<br>Fee<br>Code | Entity<br>Fee<br>(\$) | Small<br>Fee<br>Code | Entity<br>Fee<br>(\$) | Fee Description        | Fee Paid |
|----------------------|-----------------------|----------------------|-----------------------|------------------------|----------|
| 101                  | 710                   | 201                  | 355                   | Utility filing fee     |          |
| 106                  | 320                   | 206                  | 160                   | Design filing fee      |          |
| 107                  | 490                   | 207                  | 245                   | Plant filing fee       |          |
| 108                  | 710                   | 208                  | 355                   | Reissue filing fee     |          |
| 114                  | 150                   | 214                  | 75                    | Provisional filing fee |          |

**SUBTOTAL (1)**

(\$ 0)

**2. EXTRA CLAIM FEES**

| Total Claims          | Extra<br>Claims | Fee from<br>below | Fee<br>Paid |
|-----------------------|-----------------|-------------------|-------------|
| 20                    | = 0             | X                 | = 0         |
| Independent<br>Claims | -3 = 0          | X                 | = 0         |
| Multiple<br>Dependent |                 | X                 | = 0         |

| Large<br>Fee<br>Code | Entity<br>Fee<br>(\$) | Small<br>Fee<br>Code | Entity<br>Fee<br>(\$) | Fee Description                                            |
|----------------------|-----------------------|----------------------|-----------------------|------------------------------------------------------------|
| 103                  | 18                    | 203                  | 9                     | Claims in excess of 20                                     |
| 102                  | 80                    | 202                  | 40                    | Independent claims in excess of 3                          |
| 104                  | 270                   | 204                  | 135                   | Multiple dependent claim, if not paid                      |
| 109                  | 80                    | 209                  | 40                    | ** Reissue independent claims over original patent         |
| 110                  | 18                    | 210                  | 9                     | ** Reissue claims in excess of 20 and over original patent |

**SUBTOTAL (2)**

(\$ 0)

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)**

| Large<br>Entity<br>Fee<br>Code | Large<br>Entity<br>Fee<br>(\$) | Small<br>Entity<br>Fee<br>Code | Small<br>Entity<br>Fee<br>(\$) | Fee Description                                                            | Fee<br>Paid |
|--------------------------------|--------------------------------|--------------------------------|--------------------------------|----------------------------------------------------------------------------|-------------|
| 105                            | 130                            | 205                            | 65                             | Surcharge - late filing fee or oath                                        | 130         |
| 127                            | 50                             | 227                            | 25                             | Surcharge - late provisional filing fee or cover sheet.                    |             |
| 139                            | 130                            | 139                            | 130                            | Non-English specification                                                  | 130         |
| 147                            | 2,520                          | 147                            | 2,520                          | For filing a request for reexamination                                     |             |
| 112                            | 920*                           | 112                            | 920*                           | Requesting publication of SIR prior to Examiner action                     |             |
| 113                            | 1,840*                         | 113                            | 1,840*                         | Requesting publication of SIR after Examiner action                        |             |
| 115                            | 110                            | 215                            | 55                             | Extension for reply within first month                                     | 110         |
| 116                            | 390                            | 216                            | 195                            | Extension for reply within second month                                    |             |
| 117                            | 890                            | 217                            | 445                            | Extension for reply within third month                                     |             |
| 118                            | 1,390                          | 218                            | 695                            | Extension for reply within fourth month                                    |             |
| 128                            | 1,890                          | 228                            | 945                            | Extension for reply within fifth month                                     |             |
| 119                            | 310                            | 219                            | 155                            | Notice of Appeal                                                           |             |
| 120                            | 310                            | 220                            | 155                            | Filing a brief in support of an appeal                                     |             |
| 121                            | 270                            | 221                            | 135                            | Request for oral hearing                                                   |             |
| 138                            | 1,510                          | 138                            | 1,510                          | Petition to institute a public use proceeding                              |             |
| 140                            | 110                            | 240                            | 55                             | Petition to revive - unavoidable                                           |             |
| 141                            | 1,240                          | 241                            | 620                            | Petition to revive - unintentional                                         |             |
| 142                            | 1,240                          | 242                            | 620                            | Utility issue fee (or reissue)                                             |             |
| 143                            | 440                            | 243                            | 220                            | Design issue fee                                                           |             |
| 144                            | 600                            | 244                            | 300                            | Plant issue fee                                                            |             |
| 122                            | 130                            | 122                            | 130                            | Petitions to the Commissioner                                              |             |
| 123                            | 130                            | 123                            | 130                            | Petitions related to provisional applications                              |             |
| 126                            | 180                            | 126                            | 180                            | Submission of Information Disclosure Stmt                                  |             |
| 581                            | 40                             | 581                            | 40                             | Recording each patent assignment per property (times number of properties) | 40          |
| 146                            | 710                            | 246                            | 355                            | Filing a submission after final rejection (37 CFR § 1.129(a))              |             |
| 149                            | 710                            | 249                            | 355                            | For each additional invention to be examined (37 CFR § 1.129(b))           |             |
| 179                            | 710                            | 279                            | 355                            | Request for Continued Examination (RCE)                                    |             |
| 169                            | 900                            | 169                            | 900                            | Request for expedited examination of a design application                  |             |

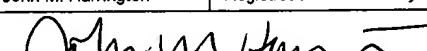
Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

**SUBTOTAL (3)**

(\$ 410)

**SUBMITTED BY****Complete (if applicable)**

|                   |                                                                                     |                                  |        |           |              |
|-------------------|-------------------------------------------------------------------------------------|----------------------------------|--------|-----------|--------------|
| Name (Print/Type) | John M. Harrington                                                                  | Registration No. Attorney/Agent) | 25,592 | Telephone | 336-607-7300 |
| Signature         |  |                                  |        | Date      | 5/24/01      |

**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of : HAKE, Jens, et al.  
Serial No. : 09/786,164  
Filed : February 28, 2001  
Art Unit : Unknown  
Examiner : Unknown  
For : METHOD FOR IMPROVING THE SECURITY OF  
AUTHENTICATION PROCEDURES IN DIGITAL  
MOBILE RADIO TELEPHONE SYSTEMS

**Assistant Commissioner for Patents**  
**Box MISSING PARTS**  
**Washington, D.C. 20231**

**STATEMENT OF ACCURACY OF TRANSLATION**  
(37 C.F.R. §§ 1.52(d), 1.55(a), 1.69)

I, the below named translator, hereby state:

My name and post office address are as stated below;

That I am knowledgeable in the English language and in the language of the

- ☐ attached document  
☒ below identified document

and I believe the attached English translation to be a true and complete translation of this document.

The Document for which the attached English translation is being submitted was filed in the United States Patent and Trademark office as "Verfahren zur Erhöhung der Sicherheit

09/786,164-0524104

von Authentisierungsverfahren in digitalen Mobilfunksystemen" (Original German Language Specification, Appln. No. 198 40 742.4).

☐ This foreign language document was filed in the PTO on February 28, 2001.  
(date)

Full name of the translator Caroline Simmen Domenig

Signature of the translator Caroline Simmen Domenig

Post Office Address 1110 Whispering Pines Dr.  
Kernersville, NC 27284

(Statement of Accuracy of Translation - page 2 of 2)